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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/721,372	ISLAM ET AL.	
	Examiner	Art Unit	
	Anish Sikri	2143	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 25 November 2003.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-28 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 11/25/03 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)
 Paper No(s)/Mail Date _____
- 4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date _____
- 5) Notice of Informal Patent Application
- 6) Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.

Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-4, 9-10, 13-15, 17, 23-24, 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ciscon et al (US Pub 2002/0004827), in view of Smith et al (US Pub 2004/0181476).

Claims 5, 6, 11-12, 18-19, 21-22, 27, 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ciscon et al (US Pub 2002/0004827), in view of Smith et al (US Pub 2004/0181476), in further view of Randle et al (US Pub 2006/0248205).

Claims 7-8, 16, 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ciscon et al (US Pub 2002/0004827), in view of Smith et al (US Pub 2004/0181476), in further view of Battou (US Pub 2002/0174207).

Claims 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ciscon et al (US Pub 2002/0004827), in view of Smith et al (US Pub 2004/0181476), and Randle et al (US Pub 2006/0248205) in further view of Battou (US Pub 2002/0174207).

Consider **Claim 1**, Ciscon et al discloses a carrier virtual network interface system (Ciscon et al, Pg 3, [0038], Pg 4, [0047]) to, allow an accessing telecommunication network managed by a network management system to indirectly manage the layer one resources dedicated to a Carrier virtual network, the layer one resources dedicated to the carrier virtual network being directly managed by the network management system of each of at least one dedicating telecommunication network (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014], Pg 4 [0047], Pg [0057]), the interface system comprising:

a dedicating network interpretation layer that interfaces With the network management system of a dedicating telecommunication network, the dedicating network interpretation layer converting network information regarding layer one 'resources dedicated to the carrier virtual network from the dedicating telecommunication network (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]) to messages for transmission to the network management System of the accessing telecommunication network and converting messages (Smith et al, Pg3, [0039]) from the network management; system of the accessing telecommunication network to network (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]) instructions for use, by the network management system of the dedicating telecommunication network;

an accessing network interpretation layer that interfaces with the network, management system of the accessing telecommunication network; the accessing

network interpretation layer (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]) converting messages (Smith et al, Pg3, [0039]) received from the network management system of the dedicating telecommunication network to network information for use by the network management system of the accessing telecommunication network and converting network instructions from the network management system of the accessing telecommunication network to messages (Smith et al, Pg3, [0039]) for transmission to the network management system of each of the at least one dedicating telecommunication networks (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014], Pg 4 [0047], Pg [0057]); and a communication layer (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]) that transmits messages (Smith et al, Pg3, [0039]) from the dedicating network interpretation layer to the accessing network interpretation layer and from the accessing network interpretation layer to the dedicating network interpretation layer (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]).

Ciscon et al fails to disclose the transmission and converting of messages in the network.

Nonetheless, Smith et al discloses the transmission and converting of messages in the network (Smith et al, Pg3, [0039]).

Therefore it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to allow the use of transmitting and converting of messages, taught by Smith et al, for the purpose of integrating the message feature to the network interface device/network management system, in the invention taught by

Ciscon et al, for the purpose of facilitating communication between nodes/systems about resource management of layer 1 devices.

Consider **Claim 2**, Ciscon et al, as modified by Smith et al discloses the carrier virtual network interface of **claim 1**, further comprising: a second dedicated network interpretation layer that interfaces with the network management system of a second dedicating telecommunication network (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]), the second dedicated network interpretation layer converting network information regarding layer one resources dedicated to the carrier virtual network from the second dedicating telecommunication network (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]) to messages for transmission to the network management system of the accessing telecommunication network and converting messages (Smith et al, Pg3, [0039]) from the network management system of the accessing telecommunication network to network instructions for use by the network management system of the second dedicating telecommunication network (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]).

Ciscon et al, as modified by Smith et al fails to disclose the transmission and converting of messages in the network.

Nonetheless, Smith et al discloses the transmission and converting of messages in the network (Smith et al, Pg3, [0039]).

Therefore it would have been obvious to a person of ordinary skill in the art the time of the invention was made to allow the use of transmitting and converting of

messages, taught by Smith et al, for the purpose of integrating the message feature to the network interface device/network management system, in the invention taught by Ciscon et al, for the purpose of facilitating communication between nodes/systems about resource management of layer 1 devices.

Consider **Claim 3**, Ciscon et al, as modified by Smith et al discloses the carrier virtual network interface of **claim 1**, wherein: the dedicated network interpretation layer (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]) and the accessing network interpretation layer (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]).

Ciscon et al, as modified by Smith et al fails to disclose the use of converting network XML messaging.

Nonetheless, Smith et al clearly discloses the communication of network information into XML messages (Smith et al, Pg 3, [0039]).

Therefore it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to allow the use of transmitting and converting of messages into XML, taught by Smith et al, for the purpose of integrating the XML message feature to network interface device/network management system, in the invention taught by Ciscon et al, for the purpose of facilitating communication between nodes/systems in the networks.

Consider **Claim 4**, Ciscon et al, as modified by Smith et al discloses the carrier

virtual network interface of **claim 2**, wherein:

the dedicated network interpretation layer (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]) converts network information to XML messages (Smith et al, Pg3, [0039]); the second dedicated network interpretation layer (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]) converts network information to XML messages (Smith et al, Pg3, [0039]); and the accessing network interpretation layer (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]) converts network instructions to XML messages (Smith et al, Pg3, [0039]).

Ciscon et al, as modified by Smith et al fails to disclose the use of converting network information into XML messaging.

Nonetheless, Smith et al clearly discloses the use of converting network information into XML messaging (Smith et al, Pg 3, [0039]).

Therefore it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to allow the use of transmitting and converting of messages into XML, taught by Smith et al, for the purpose of integrating the XML message feature to network interface device/network management system, in the invention taught by Ciscon et al, for the purpose of facilitating communication between notes/systems in the networks.

Consider **Claim 9**, Ciscon et al, as modified by Smith et al discloses the carrier virtual network interface of **claim 1**, wherein the communication layer (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]).

Ciscon et al, as modified by Smith et al fails to disclose the use of JMS protocol for messaging.

Nonetheless, Smith et al clearly discloses the communication of network information into messages transmitted via JMS protocol (Smith et al, Pg 3, [0039]).

Therefore it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to allow the use of transmitting and converting of messages into JMS protocol, taught by Smith et al, for the purpose of integrating the use of JMS protocol to send the messages into the network interface device/network management system, in the invention taught by Ciscon et al, for the purpose of facilitating communication between notes/systems in the networks.

Consider **Claim 10**, Ciscon et al, as modified by Smith et al discloses the carrier virtual network interface of **claim 2**, wherein the communication layer (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]).

Ciscon et al, as modified by Smith et al fails to disclose the use of JMS protocol for messaging.

Nonetheless, Smith et al clearly discloses the communication of network information into messages transmitted via JMS protocol (Smith et al, Pg 3, [0039]).

Therefore it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to allow the use of transmitting and converting of messages into JMS protocol, taught by Smith et al, for the purpose of integrating the use of JMS protocol to send the messages into the network interface device/network

management system, in the invention taught by Ciscon et al, for the purpose of facilitating communication between notes/systems in the networks.

Consider **Claim 13**, Ciscon et al discloses the carrier virtual network interface system to allow an accessing telecommunication network (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]) managed by a network management system to indirectly manage the layer one resources dedicated to a carrier virtual network, the layer one resources dedicated to the carrier virtual network being directly managed by the network management system of each of at least one dedicating telecommunication network (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]) the interface system comprising: a dedicating network business layer (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]), the dedicating network business layer transmitting signals between the network management system of the dedicating telecommunication network and the layer one resources of the dedicating telecommunication network (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]), the signals transmitted over the dedicating network business layer permitting the network management system of the dedicating telecommunication network, to directly manage the layer one resources of the dedicating telecommunication network (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]);

An accessing network business layer, the accessing network business layer transmitting signals between the network management system of the accessing telecommunication network (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2,

[0014]), and the layer one resources of the accessing telecommunication network (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]), the signals transmitted over the accessing network business layer permitting, the network management system of the accessing telecommunication network to directly manage the layer one resources of the accessing telecommunication network (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]);

A dedicating network interpretation layer, the dedicating network interpretation layer converting signals received from the layer one resources of the dedicating telecommunication network (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]) having a predetermined format to signals for transmission to the layer one resources of the dedicating telecommunication network (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]) dedicated to the carrier virtual network (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]);

An accessing network interpretation layer (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]), the accessing network interpretation layer (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]) converting network instructions from the network management system of the accessing telecommunication network (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]) intended for the layer one resources of the dedicating telecommunication network (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]);

And a communication layer (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]), the communication layer transmitting messages (Smith et al, Pg 3,

[0039]) having a predetermined format between the dedicating network interpretation layer and the accessing network interpretation layer (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]), whereby the network management system of the accessing telecommunication network (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]) indirectly manages the layer-one, resources, of the dedicating telecommunication network (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]) dedicated to the carrier virtual network by the network management system of the accessing telecommunication network (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]) issuing network-instructions intended for the layer one resources of the dedicating, telecommunication network (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]), the network instructions being directed to the accessing network interpretation layer; the accessing network interpretation layer (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]).

The communication layer (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]) from the accessing network interpretation (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]) layer to the dedicating network translation layer;

The dedicating network interpretation layer (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]) converting the messages (Smith et al, Pg3, [0039]) received from the communication layer to network instructions for transmission over the dedicating network business layer (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]), the accessing network interpretation layer directing the network instructions to the layer one resources of telecommunication network (Ciscon et al, Pg

3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]) dedicated to the carrier virtual;

The layer one resources of the dedicating telecommunication network transmitting network information over the dedicating network business layer to the dedicating network interpretation layer (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]); and being directed to the communication layer (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]);

The communication layer transmitting messages from the dedicating network interpretation layer to the accessing network interpretation layer (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]);

The accessing network interpretation layer received from the communication layer to network information (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]), the accessing network interpretation layer directing the network information to the management system of the accessing telecommunication network; and

The management system of the accessing telecommunication network (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]) receives network information regarding the layer one resources of the dedicating telecommunication network (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]) dedicated to the carrier virtual network from the accessing network translation layer.

Ciscon et al fails to disclose the transmission and converting of messages in the network from the network layers.

Nonetheless, Smith et al discloses the transmission and converting of messages in the network from the network layers (Smith et al, Pg3, [0039]).

Therefore it would have been obvious to a person of ordinary skill in the art art the time of the invention was made to allow the use of transmitting and converting of messages, taught by Smith et al, for the purpose of integrating the message feature to the network interface device/network management system, in the invention taught by Ciscon et al, for the purpose of facilitating communication between nodes/systems about resource management of layer 1 devices.

Consider **Claim 14**, Ciscon et al discloses the method for interfacing the management of layer one telecommunication resources in a carrier virtual network (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]), wherein the management system of an accessing telecommunication network (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]) may indirectly manage layer one resources dedicated to the carrier virtual network by at least one dedicating telecommunication network (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]) having a dedicating telecommunication network management system, the method comprising:

converting network information regarding layer (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]), to the management system of an accessing telecommunication network (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]); transmitted to the management system of the accessing telecommunication network to a format useable by the accessing, telecommunication network management system (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]);

issuing network instructions for the layer one resources of the dedicating telecommunication network, dedicated to the carrier Virtual network from the network management system of the accessing telecommunication network (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]); to the management system of a dedicating telecommunication network (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]); transmitted to the management system of the dedicating telecommunication network to network instructions to a format useable by the dedicating telecommunication network management system (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]); and transmitting the network instructions to the layer one resources of the dedicating telecommunication network (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]) dedicated to the carrier virtual network to those layer one resources.

Ciscon et al fails to disclose the transmission and converting of messages in the network layers.

Nonetheless, Smith et al discloses the transmission and converting of messages in the network layers (Smith et al, Pg3, [0039]).

Therefore it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to allow the use of transmitting and converting of messages, taught by Smith et al, for the purpose of integrating the message feature to the network interface device/network management system, in the invention taught by Ciscon et al, for the purpose of facilitating communication between nodes/systems about resource management of layer 1 devices.

Consider **Claim 15**, Ciscon et al, in view of Smith et al discloses the method for interfacing the management of layer one telecommunication resources (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]) of **claim 14**.

Ciscon et al, as modified by Smith et al fails to disclose the use of XML messaging.

Nonetheless, Smith et al clearly discloses the communication of network information into XML messages (Smith et al, Pg 3, [0039]).

Therefore it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to allow the use of transmitting and converting of messages into XML, taught by Smith et al, for the purpose of integrating the XML message feature to network interface device/network management system, in the invention taught by Ciscon et al, for the purpose of facilitating communication between notes/systems in the networks.

Consider **Claim 17**, Ciscon et al, as modified by Smith et al discloses the method for interfacing, the management of layer one telecommunication resources (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]) of **claim 15**, wherein the steps of transmitting messages (Smith et al, Pg3, [0039]) having a predetermined format to the management system of an accessing telecommunication network and of transmitting, messages (Smith et al, Pg3, [0039]) having a predetermined format to the management system of a dedicating telecommunication network (Ciscon et al, Pg 3,

[0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]) comprises transmitting messages using a JMS protocol (Smith et al, Pg3, [0039]).

Ciscon et al fails to disclose the use of JMS protocol for communication of network information into messages in the network.

Nonetheless, Smith et al clearly discloses the communication of network information into messages transmitted via JMS protocol (Smith et al, Pg 3, [0039]).

Therefore it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to allow the use of transmitting and converting of messages into JMS protocol, taught by Smith et al, for the purpose of integrating the use of JMS protocol to send the messages into the network interface device/network management system, in the invention taught by Ciscon et al, for the purpose of facilitating communication between notes/systems in the networks.

Consider **Claim 23**, Ciscon et al discloses that at least one machine readable media containing machine readable code embodied thereon for causing a carrier virtual network system to perform a method for interfacing the management of layer one telecommunication resources (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]) in a carrier virtual network, wherein the management system of an accessing telecommunication network (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]) may indirectly manage layer one resources dedicated to the carrier virtual network by at least one dedicating telecommunication network (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]) having a dedicating telecommunication

network management system (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]), the method comprising:

converting network information regarding layer one resources of the-dedicating telecommunication network (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]) to the management system of an accessing telecommunication network (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]) to the management system of the accessing telecommunication network to a format useable by the accessing telecommunication network management system (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]); issuing network instructions for the layer one resources of the dedicating telecommunication network dedicated to the carrier virtual network from the network management system of the accessing telecommunication network (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]); to the management system of a dedicating telecommunication network (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]); to the management system of the dedicating telecommunication network (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]) to network instructions to a format useable by the dedicating telecommunication network management system; and transmitting the network instructions to the layer one resources of the dedicating telecommunication network (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]) dedicated to the carrier virtual network to those layer one resources.

Ciscon et al fails to disclose the transmission and converting of messages in the network layers.

Nonetheless, Smith et al discloses the transmission and converting of messages in the network layers (Smith et al, Pg3, [0039]).

Therefore it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to allow the use of transmitting and converting of messages, taught by Smith et al, for the purpose of integrating the message feature to the network interface device/network management system, in the invention taught by Ciscon et al, for the purpose of facilitating communication between nodes/systems about resource management of layer 1 devices.

Consider **Claim 24**, Ciscon et al, as modified by Smith et al fails to disclose clearly discloses that at least one machine readable media of **claim 23**, wherein the predetermined format of messages is XML

Nonetheless, Smith et al clearly discloses the predetermined format of the messages is XML (Smith et al, Pg 3, [0039]).

Ciscon et al, in view of Smith et al clearly discloses that at least one machine readable media of claim 23, wherein the predetermined format of messages is XML (Smith et al, Pg 3, [0039]).

Therefore it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to allow the use of transmitting and converting of messages into XML, taught by Smith et al, for the purpose of integrating the XML message feature to network interface device/network management system, in the

invention taught by Ciscon et al, for the purpose of facilitating communication between notes/systems in the networks.

Consider **Claim 26**, Ciscon et al, as modified by Smith et al discloses the at least one machine readable media: of **claim 24**, an accessing telecommunication network (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]) and of transmitting messages (Smith et al, Pg3, [0039]) having a predetermined format to the management system of a dedicating messages using a JMS protocol (Smith et al, Pg3, [0039]).

Ciscon et al, fails to disclose the use of JMS protocol for messaging format to the management system.

Nonetheless, Smith et al clearly discloses the use of JMS protocol for messaging format to the management system. (Smith et al, Pg 3, [0039]).

Therefore it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to allow the use of transmitting and converting of messages into JMS protocol, taught by Smith et al, for the purpose of integrating the use of JMS protocol to send the messages into the network interface device/network management system, in the invention taught by Ciscon et al, for the purpose of facilitating communication between notes/systems in the networks.

Claims 5, 6, 11-12, 18-19, 21-22, 27, 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ciscon et al (US Pub 2002/004827), in view of Smith et al (US Pub 2004/0181476), in further view of Randle et al (US Pub 2006/0248205).

Consider **Claim 5**, Ciscon et al, as modified by Smith et al discloses the carrier virtual network interface of **claim 1**, wherein: the dedicated network interpretation layer (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]); and the accessing network interpretation layer (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]).

Ciscon et al, as modified by Smith et al fails to disclose the use of conversion of network information into ASCII text messages.

Nonetheless, Randle et al, discloses the use of conversion of network information into ASCII text messages (Randle et al, Pg 8, [0087]).

Therefore it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to allow the use of transmitting and converting of messages into ASCII text, taught by Randle et al, for the purpose of integrating the XML message feature to network interface device/network management system, in the invention taught by Ciscon et al, in view of Smith et al, for the purpose of facilitating communication between notes/systems in the networks.

Consider **Claim 6**, Ciscon et al, as modified by Smith et al discloses the carrier

virtual network interface of **claim 2**, wherein:

the dedicated network interpretation layer (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]) the second dedicated network interpretation layer (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]).

Ciscon et al, as modified by Smith et al fails to disclose the use of conversion of network information into ASCII text messages.

Nonetheless, Randle et al, discloses the use of conversion of network information into ASCII text messages (Randle et al, Pg 8, [0087]).

Therefore it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to allow the use of transmitting and converting of messages into ASCII text, taught by Randle et al, for the purpose of integrating the XML message feature to network interface device/network management system, in the invention taught by Ciscon et al, in view of Smith et al, for the purpose of facilitating communication between notes/systems in the networks.

Consider **Claim 11**, Ciscon et al, as modified by Smith et al discloses the carrier virtual network interface of **claim 1**, wherein the communication layer (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]).

Ciscon et al, as modified by Smith et al fails to disclose the use of telnet protocol for messaging.

Nonetheless, Randle et al clearly discloses the communication of network information into messages transmitted via Telnet protocol (Randle et al, Pg 8, [0087]).

Therefore it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to allow the use of transmitting and converting of messages into using Telnet protocol, taught by Randle et al, for the purpose of integrating the use of Telnet protocol to send the messages into network interface device/network management system, in the invention taught by Ciscon et al, in view of Smith et al, for the purpose of facilitating communication between notes/systems in the networks.

Consider **Claim 12**, Ciscon et al, as modified by Smith et al discloses the carrier virtual network interface of **claim 2**, wherein the communication layer (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]).

Ciscon et al, as modified by Smith et al fails to disclose the use of telnet protocol for messaging.

Nonetheless, Randle et al clearly discloses the communication of network information into messages transmitted via Telnet protocol (Randle et al, Pg 8, [0087]).

Therefore it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to allow the use of transmitting and converting of messages into using Telnet protocol, taught by Randle et al, for the purpose of

integrating the use of Telnet protocol to send the messages into network interface device/network management system, in the invention taught by Ciscon et al, in view of Smith et al, for the purpose of facilitating communication between notes/systems in the networks.

Consider **Claim 18**, Ciscon et al, as modified by Smith et al discloses the method for interfacing the management of layer one telecommunication resources (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]) of **claim 15**, wherein the steps of transmitting messages having a predetermined format to the management system of an accessing telecommunication network (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]) and of transmitting messages (Smith et al, Pg3, [0039]) having a predetermined format to the management system of a dedicating telecommunication network (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014])

Ciscon et al, as modified by Smith et al fails to disclose the use of telnet protocol for messaging.

Nonetheless, Randle et al clearly discloses the communication of network information into messages transmitted via Telnet protocol (Randle et al, Pg 8, [0087]).

Therefore it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to allow the use of transmitting and converting of messages into using Telnet protocol, taught by Randle et al, for the purpose of integrating the use of Telnet protocol to send the messages into network interface device/network management system, in the invention taught by Ciscon et al, in view of

Smith et al, for the purpose of facilitating communication between notes/systems in the networks.

Consider **Claim 19**, Ciscon et al, in view of Smith et al discloses the method for interfacing the management of layer-one telecommunication resources (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]) of **claim 14**.

Ciscon et al, as modified by Smith et al fails to disclose the use of ASCII text messages format.

Nonetheless, Randle et al, discloses the use of ASCII text messages format (Randle et al, Pg 8, [0087]).

Therefore it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to allow the use of transmitting and converting of messages into ASCII text, taught by Randle et al, for the purpose of integrating the ASCII message feature to network interface device/network management system, in the invention taught by Ciscon et al, in view of Smith et al, for the purpose of facilitating communication between notes/systems in the networks.

Consider **Claim 21**,

Ciscon et al, in view of Smith et al, and Randle et al discloses the method for interfacing the management of layer one telecommunication resources (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]) of **claim 19**, wherein the steps of transmitting messages having a predetermined format to the management system of an

accessing telecommunication network (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]) and of transmitting messages (Smith et al, Pg3, [0039]) having a predetermined format to the management system of a dedicating telecommunication network (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]) comprises transmitting messages (Smith et al, Pg3, [0039]).

Ciscon et al, as modified by Smith et al and Randle et al fails to disclose the use of JMS protocol for messaging.

Nonetheless, Smith et al clearly discloses the communication of network information into messages transmitted via JMS protocol (Smith et al, Pg 3, [0039]).

Therefore it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to allow the use of transmitting and converting of messages into JMS protocol, taught by Smith et al, for the purpose of integrating the use of JMS protocol to send the messages into the network interface device/network management system, in the invention taught by Ciscon et al, in view of Randle et al for the purpose of facilitating communication between notes/systems in the networks.

Consider **Claim 22**, Ciscon et al, in view of Smith et al discloses the method for interfacing the management of layer one telecommunication resources (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]) of **claim 19**, wherein the steps of transmitting messages (Smith et al, Pg3, [0039]) having a predetermined format to the management system of an accessing telecommunication network (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]) and of transmitting messages (Smith et

al, Pg3, [0039]) having a predetermined format to the management system of a dedicating telecommunication network (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]), comprises transmitting messages (Smith et al, Pg3, [0039]).

Ciscon et al, as modified by Smith et al fails to disclose the use of telnet protocol for messaging.

Nonetheless, Randle et al clearly discloses the communication of network information into messages transmitted via Telnet protocol (Randle et al, Pg 8, [0087]).

Therefore it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to allow the use of transmitting and converting of messages into using Telnet protocol, taught by Randle et al, for the purpose of integrating the use of Telnet protocol to send the messages into network interface device/network management system, in the invention taught by Ciscon et al, in view of Smith et al, for the purpose of facilitating communication between notes/systems in the networks.

Consider **Claim 27**,

Ciscon et al discloses, in view of Smith et al the at least one machine readable media of **claim 24**, wherein the steps of transmitting messages (Smith et al, Pg3, [0039]) having a predetermined format to the management system of an accessing telecommunication network (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]) and of transmitting messages (Smith et al, Pg3, [0039]) having a predetermined format to the management, system of a dedicating telecommunication messages.

Ciscon et al, as modified by Smith et al fails to disclose the use of telnet protocol for messaging.

Nonetheless, Randle et al clearly discloses the communication of network information into messages transmitted via Telnet protocol (Randle et al, Pg 8, [0087]).

Therefore it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to allow the use of transmitting and converting of messages into using Telnet protocol, taught by Randle et al, for the purpose of integrating the use of Telnet protocol to send the messages into network interface device/network management system, in the invention taught by Ciscon et al, in view of Smith et al, for the purpose of facilitating communication between notes/systems in the networks.

Consider **Claim 28**, Ciscon et al, in view of Smith et al discloses that at least one machine readable media of **claim 23**, wherein the predetermined format of messages (Smith et al, Pg3, [0039]).

Ciscon et al, as modified by Smith et al fails to disclose the use of ASCII text format messages.

Nonetheless, Randle et al, discloses the use of ASCII text format messages (Randle et al, Pg 8, [0087]).

Therefore it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to allow the use of transmitting and converting of messages into ASCII text, taught by Randle et al, for the purpose of integrating the XML

message feature to network interface device/network management system, in the invention taught by Ciscon et al, in view of Smith et al, for the purpose of facilitating communication between notes/systems in the networks.

Claims 7-8, 16, 20, 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ciscon et al (US Pub 2002/004827), in view of Smith et al (US Pub 2004/0181476), in further view of Battou (US Pub 2002/0174207).

Consider **Claim 7**, Ciscon et al, as modified by Smith et al clearly discloses the carrier virtual network interface of **claim 1**, wherein the communication layer (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]) transmits messages.

Ciscon et al, as modified by Smith et al fails to disclose the use of CORBA protocol for messaging.

Nonetheless, Battou clearly discloses the communication of network information into messages transmitted via CORBA protocol (Battou, Pg 18, [0276]).

Therefore it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to allow the use of transmitting and converting of messages into CORBA protocol, taught by Battou, for the purpose of integrating the use of CORBA protocol to send the messages into the network interface device/network management system, in the invention taught by Ciscon et al, in view of Smith et al, for the purpose of facilitating communication between notes/systems in the networks

Consider **Claim 8**, Ciscon et al, as modified by Smith et al, discloses the carrier virtual network interface of **claim 2**, wherein the communication layer (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014])

Ciscon et al, as modified by Smith et al fails to disclose the use of CORBA protocol for messaging.

Nonetheless, Battou clearly discloses the communication of network information into messages transmitted via CORBA protocol (Battou, Pg 18, [0276]).

Therefore it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to allow the use of transmitting and converting of messages into CORBA protocol, taught by Battou, for the purpose of integrating the use of CORBA protocol to send the messages into the network interface device/network management system, in the invention taught by Ciscon et al, in view of Smith et al, for the purpose of facilitating communication between notes/systems in the networks.

Consider **Claim 16**, Ciscon et al, as modified by Smith et al discloses the method for interfacing the management of layer one telecommunication resources (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]) of **claim 15**, wherein the steps of transmitting messages (Smith et al, Pg3, [0039]) having a predetermined format to the management system of an accessing telecommunication network (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]) and of transmitting messages (Smith et al, Pg3, [0039]) having a predetermined format to the management system of a dedicating telecommunication network (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]) comprises transmitting messages using a CORBA protocol (Battou, Pg 18, [0276]).

Ciscon et al, as modified by Smith et al fails to disclose the use of CORBA protocol for messaging.

Nonetheless, Battou clearly discloses the communication of network information into messages transmitted via CORBA protocol (Battou, Pg 18, [0276]).

Therefore it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to allow the use of transmitting and converting of messages into CORBA protocol, taught by Battou, for the purpose of integrating the use of CORBA protocol to send the messages into the network interface device/network management system, in the invention taught by Ciscon et al, in view of Smith et al, for the purpose of facilitating communication between notes/systems in the networks

Consider **Claim 25**, Ciscon et al, in view of Smith et al discloses the at least one machine readable media of claim 24, wherein the steps of transmitting messages (Smith et al, Pg3, [0039]) having a predetermined format to the management system of an accessing a telecommunication network (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]) and of transmitting messages (Smith et al, Pg3, [0039]) having a predetermined format to the, management system of a dedicating telecommunication

network (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]) comprises transmitting messages (Smith et al, Pg3, [0039]).

Ciscon et al, as modified by Smith et al fails to disclose the use of CORBA protocol for messaging.

Nonetheless, Battou clearly discloses the communication of network information into messages transmitted via CORBA protocol (Battou, Pg 18, [0276]).

Therefore it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to allow the use of transmitting and converting of messages into CORBA protocol, taught by Battou, for the purpose of integrating the use of CORBA protocol to send the messages into the network interface device/network management system, in the invention taught by Ciscon et al, in view of Smith et al, for the purpose of facilitating communication between notes/systems in the networks.

Claims 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ciscon et al (US Pub 2002/0004827), in view of Smith et al (US Pub 2004/0181476), and Randle et al (US Pub 2006/0248205) in further view of Battou (US Pub 2002/0174207).

Consider **Claim 20**, Ciscon et al, as modified of Smith et al and Randle et al discloses the method for interfacing the management of layer one telecommunication resources (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]) of **claim**

19, wherein the steps of transmitting messages (Smith et al, Pg3, [0039]) having a predetermined format to the management system of an accessing telecommunication network (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]) and of transmitting messages having a predetermined format to the management system of a dedicating telecommunication network (Ciscon et al, Pg 3, [0038], Pg 3, [0041], Pg 3, [0013], Pg 2, [0014]) comprises transmitting messages (Smith et al, Pg3, [0039])

Ciscon et al, as modified by Smith et al, and Randle et al fails to disclose the use of CORBA protocol for messaging.

Nonetheless, Battou clearly discloses the communication of network information into messages transmitted via CORBA protocol (Battou, Pg 18, [0276]). Therefore it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to allow the use of transmitting and converting of messages into CORBA protocol, taught by Battou, for the purpose of integrating the use of CORBA protocol to send the messages into the network interface device/network management system, in the invention taught by Ciscon et al, in view of Smith et al, and Randle et al for the purpose of facilitating communication between notes/systems in the networks.

Conclusion

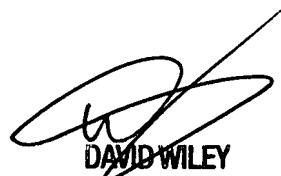
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anish Sikri whose telephone number is 571-270-1783. The examiner can normally be reached on 8am - 5pm Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wiley can be reached on 571-272-3923. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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a.s.

July 20, 2007



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